Claims

1. A method of producing a tubular threaded joint comprising a male tubular element (1) having a conical male thread (3), a female tubular element (2) having a conical female thread (4) which interacts by screwing with the male thread (3), and a deformable sealing ring (35) interposed between the male and female elements in such a way as to oppose the communication of fluid between the outside of the tubular joint and the zone of interaction of said threads, the sealing ring being in sealed contact with the male thread, and the female element having an annular housing (20) to receive the sealing ring, disposed axially between its free end (14) and the female thread and limited axially by a first shoulder (25) facing said free end, the sealing ring bearing axially against said first shoulder and being in sealed contact with the peripheral surface (22) of the housing, characterized in that a deformable sealing ring (30) is placed around said male thread, the free end (7) of the male element (1) is engaged, and the male thread (3) is screwed into the female thread (4), said sealing ring, during the screwing, being pushed along the male element by said first shoulder (25), rotated by the female element and compressed radially between the male thread, into which it is pressed, and said peripheral surface (23) of the housing (20).

2. The method as claimed in claim 1, in which the sealing ring is made of a material chosen from synthetic materials, malleable metals and composite materials.

3. The method as claimed in one of claims 1 and 2, in

which the sealing ring is made of a material having a low coefficient of friction with the material of the male element.

4. The method as claimed in one of the preceding claims, in which the sealing ring is made of filled or unfilled polytetrafluoroethylene.

5. The method as claimed in one of the preceding claims, in which the male thread comprises at the end opposite the free end (7) of the male element of the threads called diminishing threads (13) whose radial height usually diminishes from a nominal value to a zero value, and the sealing ring is in sealed contact with said diminishing threads over at least a portion of its axial length.

6. The method as claimed in claim 5, in which the sealing ring is in contact with said diminishing threads over all its axial length.

7. The method as claimed in claim 6, in which the sealing ring (30) is placed around said diminishing threads (13).

8. The method as claimed in one of claims 6 and 7, in which the male element is machined (41), over at least a fraction of the axial length of the diminishing threads, to a constant diameter greater than the diameter of the troughs of the threads concerned.

9. The method as claimed in claim 8, in which the sealing ring (30) is placed around the region (41) of the male element machined to a constant diameter.

10. The method as claimed in one of the preceding

claims, in which said housing has a second shoulder (24) axially facing the first shoulder and with a minimal diameter greater than that of the first shoulder, a portion of the volume of the sealing ring being compressed axially between the first and second shoulders.

11. The method as claimed in one of the preceding claims, in which the first shoulder, or at least one of the first and second shoulders, is inclined relative to the axis of the threads.

12. The method as claimed in one of the preceding claims, in which said housing emerges at the free end (14) of the female element in a flare (21).

13. The method as claimed in one of the preceding claims, in which the male element (1) has, in the vicinity of its free end, an axial abutment surface (7) suitable for interacting with an axial abutment surface (8) of the female element (2) to limit the screwing.

14. The method as claimed in one of the preceding claims, in which additional sealing means (5, 6) are provided to prevent any communication of fluid between the interior of the tubular joint and the zone of interaction of the threads.

15. The method as claimed in one of the preceding claims, in which the sealing ring is screwed onto the male thread.

16. The method as claimed in one of the preceding claims, in which the sealing ring is placed around the male thread at a temperature such that its internal diameter is greater than the external diameter of the underlying threads, its internal diameter being less than the external diameter of

the underlying threads at ambient temperature.

17. The method as claimed in one of the preceding claims, in which the sealing ring (30) is an O-ring of rectangular section elongated in the axial direction.

18. The method as claimed in claim 17, in which the external diameter of the sealing ring after it has been placed around the male thread is slightly less than the minimal radius of the peripheral surface of said housing.

19. A tubular threaded joint such as can be obtained by the method as claimed in one of the preceding claims, comprising a male tubular element (1) having a conical male thread (3), a female tubular element (2) having a conical female thread (4) which interacts by screwing with the male thread (3), and a deformable sealing ring (35) interposed between the male and female elements in such a way as to oppose the communication of fluid between the outside of the tubular joint and the zone of interaction of said threads, the sealing ring being in sealed contact with the male thread, and the female element having an annular housing (20) to receive the sealing ring, disposed axially between its free end (14) and the female thread and limited axially by a first shoulder (25) facing said free end, the sealing ring bearing axially against said first shoulder and being in sealed contact with the peripheral surface (22) of the housing.

20. The tubular threaded joint as claimed in claim 19, attached to claim 10, in which the first and second shoulders (25, 24) are respectively perpendicular to the axis of the threads and inclined relative to the latter.

21. The tubular threaded joint as claimed in claim 19, in which the housing (20) has a diameter constantly increasing toward the free end (14) of the female element, its peripheral wall (26) being greatly inclined relative to the axis of the threads at the end opposite said free end to form a shoulder (27) capable of pushing the sealing ring when the threaded elements are screwed together, and its angle then decreasing progressively.

22. The tubular threaded joint as claimed in claim 19, attached to claim 12, in which said flare (21) and the first shoulder (25) are connected together by a cylindrical surface (28).